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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/282,145	03/31/1999	GERD SCHOENWOLF	P98.2881	8232

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EXAMINER	
CORRIELUS, JEAN M	
ART UNIT	**PAPER NUMBER**
2172	20

DATE MAILED: 05/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

7

Advisory Action	Application No.	Applicant(s)	
	09/282,145	SCHOENWOLF ET AL.	
	Examiner	Art Unit	
	Jean M Corrielus	2172	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 07 May 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☒ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: *See Continuation Sheet*.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☐ The a)☐ affidavit, b)☐ exhibit, or c)☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☐ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: _____.

   Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☐ Other: _____

Jean M Corrielus
Primary Examiner
Art Unit: 2172

Continuation of 2. NOTE: 1. The currently amended claim 10 and 12 as amended do not further limited claim 1 because the claim requires that each storage area be structured to satisfy at least of (a) (function), (b)(characteristics) and (c)(hardware implementation,...) in order to store a complete configuration. Therefore, claims 10 and 12 as amended is rejected under the same basis as stated in claim 1.

DETAILED ACTION

1. This office action is in response to the amendment filed on May 21, 2004, in which claims 1-13 and 16 are presented for further examination.

Remark

2. Claim 3 indicated as an allowable as a mistake. However, claim 3 contains the same limitations of claim 1, which recited "a buffer into which is written persistent data to be permanently stored"; "a permanent memory connected to the buffer, the permanent memory having at least two storage areas, into which the persistent data alternately written, each storage area being structured to store a complete permanent configuration for at least one of: (a) (functions); (b) (characteristic of a terminal) and (c) (cards of the terminal.....). W***here the claim requires that each storage area be structured to satisfy at least one of (a), (b) and (c) in order to store a complete configuration***. Therefore, claim 3 is rejected under the same basis as claim 1.

3. The currently amended claim 10 and 12 as amended do not further limited claim 1 because ***the claim requires that each storage area be structured to satisfy at least one of (a) (function), (b)(characteristics) and (c)(hardware implementation,...) in order to store a complete configuration.*** Therefore, claims 10 and 12 as amended is rejected under the same basis as stated in claim 1

Claim Rejections - 35 U.S.C. 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-9, 11-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al US Patent no.6,301,582.

As to claim 1 recited the following: "a buffer into which is written persistent data to be permanently stored"; "a permanent memory connected to the buffer, the permanent memory having at least two storage areas, into which the persistent data alternately written, each storage area being structured to store a complete permanent configuration for at least one of: (a) (functions); (b) (characteristic of a terminal) and (c) (a hardware implementation.....).

Applicants should duly note that each storage area is structured to satisfy at least one of (a), (b) and (c) in order to store a complete configuration. Johnson. However, discloses the above mentioned limitations as follow: □a database for storing persistent data□ as a two level storage systems persistent data (col.2, lines 17-18); □a buffer into which is written all data to be permanently stored□as a shared persistent virtual storage (item 190) which includes a virtual storage manager (item 208); virtual address translator (item 210), wherein said virtual address (201) comprises a hasher, hash table and a lookaside buffers; and page cache (item 212) in which data has been stored (see fig.2). The lookaside buffer disclosed by Johnson does not directly connect to the permanent memory (data storage item 206 of fig.6). Johnson discloses □a permanent memory connected to the buffer, the permanent memory having at least first and second storage units, into which the persistent data is alternately written□ this limitation is disclosed in Johnson as a data storage (206) connected to the shared persistent virtual storage (item 190) having at least two storage area ((Backing store)1 and (Backing store)2) into which the persistent data is alternately written (see fig.2). Johnson does not explicitly the use of having the backing storage structured to store a complete permanent configuration. However, the data storage of Johnson is connected to the share persistent virtual storage (item 190 of fig.2), which contains a lookaside buffer, wherein said lookaside buffer is connected to the data storage through the use of the shared persistent virtual storage, wherein Johnson discloses that each storage unit being structured to store a complete permanent ***configuration function*** by simply copying the persistent object from backing store when is needed (col.7, lines 27-34). Therefore,

it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Johnson□ system, wherein the lookaside buffer provided therein (see Johnson□s fig.2) would directly connect to the data storage in order to alternately transfer data from a first storage unit to a second storage unit, thereby facilitating faster access.

Furthermore, the file system disclosed by Johnson contains general knowledge of the organization of the data stored on storage devices, wherein the memories and disks needed to implement properties and performance of a desired storage architecture. Notably, there is expectancy that the data stored on the file system will be preserved until explicitly removed. Therefore, persistency with respect to the storage of content is paramount to other properties and performance metrics such as organization of, and speed of access to, the to stored content. Such of these characteristics of a file system are not generally suited to the access and volatility characteristics of a cache system, wherein a cache object is characterized as a collection of data that is persistent over a predetermined period of time but that can be recovered if lost, such a novel object cache store to provide fast and efficient storage of data as cache objects.

Claims 10 and 12 are rejected under the same analysis stated in claim 1 above.

Claim 3 recites the same limitations as in claim 1, which includes "a buffer into which is written persistent data to be permanently stored"; "a permanent memory connected to the buffer, the permanent memory having at least two storage areas, into which the persistent data

alternately written, each storage area being structured to store a complete permanent configuration for at least one of: (a) (functions); (b) (characteristic of a terminal) and (c) (Cards of the terminal.....). ***Applicants should duly note that each storage area is structured to satisfy at least one of (a), (b) and (c) in order to store a complete configuration***. Johnson. However, discloses the above mentioned limitations as follow: □a database for storing persistent data□ as a two level storage systems persistent data (col.2, lines 17-18); □a buffer into which is written all data to be permanently stored□as a shared persistent virtual storage (item 190) which includes a virtual storage manager (item 208); virtual address translator (item 210), wherein said virtual address (201) comprises a hasher, hash table and a lookaside buffers; and page cache (item 212) in which data has been stored (see fig.2). The lookaside buffer disclosed by Johnson does not directly connect to the permanent memory (data storage item 206 of fig.6). Johnson discloses □a permanent memory connected to the buffer, the permanent memory having at least first and second storage units, into which the persistent data is alternately written□ this limitation is disclosed in Johnson as a data storage (206) connected to the shared persistent virtual storage (item 190) having at least two storage area ((Backing store)1 and (Backing store)2) into which the persistent data is alternately written (see fig.2). Johnson does not explicitly the use of having the backing storage structured to store a complete permanent configuration. However, the data storage of Johnson is connected to the share persistent virtual storage (item 190 of fig.2), which contains a lookaside buffer, wherein said lookaside buffer is connected to the data storage through the use of the shared persistent virtual storage, wherein Johnson discloses that each

storage unit being structured to store a complete permanent ***configuration function*** by simply copying the persistent object from backing store when is needed (col.7, lines 27-34). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Johnson□ system, wherein the lookaside buffer provided therein (see Johnson□s fig.2) would directly connect to the data storage in order to alternately transfer data from a first storage unit to a second storage unit, thereby facilitating faster access.

As to claim 2, Johnson discloses the claimed □wherein the data base further comprises a control mechanism within a first application process for management of a first memory controls writing of the data to be persistently stored into the buffer, the data being generated or modified by the first application process alone or also by other application, processes running simultaneously with the first application process□ (col.7, lines 10-32).

As to claim 4, Johnson substantially discloses the invention as claimed, including the recited □wherein all of the persistent data stored in the buffer is alternately written into one of the storage units or storage areas of the permanent memory□ (col.2, lines 18-24).

As to claim 5, Johnson substantially discloses the invention as claimed, including the recited □wherein only modified data sequences are alternately written into storage segments of the permanent memory□ (col.2, lines 18-24).

As to claim 6, Johnson substantially discloses the invention as claimed, including the recited □wherein the modified data sequences are written into the storage segments of the permanent memory at predetermined time intervals□ (col.2, lines 18-24).

As to claim 7, Johnson substantially discloses the invention as claimed, including the recited □wherein the modified data sequences are written into the storage segments of the permanent memory after a predetermined number of modifications□ (col.2, lines 18-24).

As to claim 8, Johnson discloses the claimed □wherein only the persistent data, if necessary including reconstruction data, is transferred into the buffer from a first memory which contains a run-time program and associated permanent data□ (col.2, lines 30-33).

As to claim 9, Johnson discloses the claimed □wherein the persistent data is stored in a space-saving manner as a data sequence in the buffer and in the permanent memory□ (col.5, lines 1-4).

As to claims 11, Johnson substantially discloses the invention as claimed including the recited □wherein if construction data which is useable for reconstruction is present in the buffer,

the configuration data to be written into a first memory is automatically recovered from the reconstruction data stored in the buffer□ (col.6, lines 19-27).

As to claim 13, Johnson does not explicitly disclose a loadable Flash Erasable Programmable Read Only Memory chip. It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement Johnson□ system, including a loadable Flash Erasable Programmable Read Only Memory chip. This motivation would have been to allow Johnson□s permanent memory to stay stable for long periods without electricity while still allowing reprogramming.

As to claim 16, Johnson discloses the claimed □wherein a number of configuration changes are only performed at a data management side and thereafter at least one of a functional and a hardware change comprising all configuration changes is performed in the terminal□ as a means wherein Java compiler compiles programs written in Java which is platform independent commands that can be interpreted and run by JVM, which must be implemented for each platform on which the Java program must be run (col.7, lines 65-col.8, line 6).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (703) 306-3035. The examiner can normally be reached on Monday - Friday (12:00pm - 7:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jean M. Corrielus

Patent Examiner

May 21, 2004